

ABSTRACT OF THE DISCLOSURE

An exponent part extraction section extracts a bit series from the exponent part of an inputted floating point data. A mantissa part extraction section extracts the uppermost K bits from the mantissa part of the floating point data. A first conversion section inputs the output e from the exponent part extraction section and outputs the value of a function $X(e)$ thereof. A second conversion section inputs the output f from the mantissa part extraction section and outputs the value of a function $Y(f)$ thereof. A multiplier section multiplies together these values. By setting suitable tables in advance in the first and the second conversion sections, the calculation of the v^p for an item v of floating point data can be performed.